

DOCUMENT RESUME

ED 420 080

CS 216 391

AUTHOR Zimmerman, Diane P.
TITLE A Fissure in the Second Order: A New Look at Change and School Reform.
PUB DATE 1998-04-00
NOTE 7p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Diego, CA, April 13-17, 1998).
PUB TYPE Information Analyses (070) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Change Agents; Cognitive Mapping; Conceptual Tempo; *Educational Change; Elementary Secondary Education; *Inquiry; *Organizational Change; *Organizational Development; *Organizational Theories
IDENTIFIERS Authorship; Organizational Research; *Second Order Effects; *Theoretical Orientation

ABSTRACT

The subject of this theoretical study emerges from the identification of a gap in the theories of first, second, and third order change. Through synthesis and critique of existing theory (Bateson, 1972; Watzlawick, Weakland, and Fisch, 1974; and Bartunek and Moch, 1987), an integrated three-part theory of change is proposed to include continuous inquiries into mental maps, reflexive practices, and authoring. Grouping these themes together in a process of continuous inquiry opens up the possibilities for a third order of change. In organizational development literature, second order change has been most often defined by changing mental maps, in contrast to first order change, which is defined as working with existing mental maps. On closer inspection, this singular definition cannot sustain second order change, for once a new mental map has been adopted the process reverts to a first order change. This raises the dilemma that to sustain second order change the mental maps must be continuously challenged. In the reflexive application of this theory for organizational change, issues of co-authorship become critical. Power and manipulation create barriers to reflexivity and limit the expansion of authoring. To achieve third order change, collaborative choices must be part of the process requiring that the change agents and the recipients work together to author options for change. Combining the three concepts--mental mapping, reflexivity, and authoring--as an integrated theory for change suggests the definition of a third order that is significantly distinct from second order change. (Contains a 16-item bibliography.) (Author/NKA)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

A Fissure in the Second Order: A New Look at Change and School Reform

***A Paper Presented at the 1998 AERA Annual Conference
San Diego, CA
April 15, 1998***

by Diane P. Zimmerman, Ph.D.
Davis Joint Unified School District
2222 Shasta Drive
Davis, CA 94585

DPZimmer@aol.com

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

D. Zimmerman

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

**A Fissure in the Second Order:
A New Look at Change and School Reform**
by Diane P. Zimmerman

Abstract:

The subject of this theoretical study emerges from the identification of a gap in the theories of first, second, and third order change. Through synthesis and critique of existing theory (Bateson, 1972, Watzlawick, Weakland, and Fisch, 1974, and Bartunek and Moch, 1987), an integrated, three part theory of change is proposed to include continuous inquiries into mental maps, reflexive practices, and authoring. Grouping these themes together in a process of continuous inquiry opens up the possibilities for a third order of change.

In organizational development literature second order change has been most often defined by changing mental maps, in contrast to first order change, which is defined as working with existing mental maps. On closer inspection, this singular definition cannot sustain second order change, for once a new mental map has been adopted the process reverts to a first order change. This raises the dilemma that to sustain second order change the mental maps must be continuously challenged. Boscolo, Cecchin, Hoffman, and Penn (1987), Argyris (1992), and McWhinney (1995) have each developed processes for reflexive inquiry which sustain second order change.

In the reflexive application of this theory for organizational change, issues of co-authorship become critical. Power and manipulation create barriers to reflexivity and limit the expansion of authoring. Zimmerman concludes that to achieve third order of change, collaborative choices must be part of the process requiring that the change agents and the recipients work together to author options for change. Combining the three concepts--mental mapping, reflexivity, and authoring--as an integrated theory for change suggests the definition of a third order that is significantly distinct from second order change.

Purpose:

This paper summarizes the key findings from Zimmerman's (1998) dissertation which synthesizes and critiques existing knowledge about the theories of first, second, and third order change. She reframes the theory around the key concepts of mental mapping, reflexivity, and authoring and identifies reflexivity as a central concept in distinguishing between the orders of change. The purposes of the dissertation were to explicate the levels of learning (Bateson, 1972) and the orders of change (Watzlawick, Weakland, and Fisch, 1974) to bound the definitions of first and second order change to set the stage for a definition of third order of change. This dissertation analyzes the psychotherapeutic work of the narrative therapists (Boscolo, Cecchin, Hoffman, and Penn, 1987, White and Epston, 1990, and Parry and Doan, 1994) along with the organizational development work (Senge, 1990, Argyris, 1992, McWhinney, 1992, Schon and Rein, 1994, and Costa and Garmston, 1995) and demonstrates that there is a fissure in the definitions of second order change that creates much confusion about the boundaries for third order change.

Most claims of educators about producing second order change are based on a limited citation trail and thus do not include reflexive practices. Some (Boscolo, Cecchin, Hoffman, and Penn, 1987) would reject the claims of educators for producing second order change as being simple reframes and therefore not second order change. They argue that second order change requires an emphasis on reflexive practices. The implications are that educational change processes might benefit from the use of reflexive practices.

Theoretical Framework:

Bateson (1972) was the first to propose the application of Russell and Whitehead's Theory of Logical Types to a critical analysis of behavior. In using this analogy Bateson posited that "labels" embody multiple levels of abstraction. He argued that "learning" is not a singular concept but rather is represented in a hierarchy of abstractions. He reasoned that behavior modification was a first order or incremental form of learning and that gestalt learning was a second order or transference form of learning. For him the only way to measure learning was through behavioral change, therefore he proposed that the words learning and change be used synonymously. Watzlawick, Weakland, and Fisch (1974) applied Bateson's theory of change to their psychotherapeutic work and published an often cited book that explicated two orders of change. A few years later Bartunek and Moch (1987) published a short paper extending the therapeutic notion of orders of change to an organizational setting positing a third order which had only been alluded to by Bateson and was not mentioned at all by Watzlawick, Weakland, and Fisch. Although the paper by Bartunek and Moch identifies "authoring" as a key concept in this theory, the examples contain inconsistencies which created a search model leading to the conclusion by this author that reflexivity as a key concept is necessary for building a solid definition for three orders of change. This interventionist model suggests three key concepts which are essential for producing second or third order change as outlined below.

Mental Mapping

Mental mapping identifies the key concept most often cited when distinguishing between first and second order change. Depending upon the theorist, the terminology changes from frames, to schemata, to gestalts, to theories-in-use, each one describing an invisible process of thinking. Mental mapping is a narrow, specialized form of meaning making whereby the change agent identifies and attempts to change layered contexts that describe these invisible skills. Mental mapping delineates a way to sort, orient to, or describe experience and is the key concept mentioned by all theorists when describing second order change; however, the theorists divide on whether a change in mental mapping is sufficient to produce second order change.

The fissure between theorists evolves from differences in applications between organizational development and psychotherapeutic practices. The narrative school of psychotherapists (Boscolo, Cecchin, Hoffman, and Penn, 1987, White and Epston, 1990, and Parry and Doan, 1994) have pushed second order change to include a cybernetic concept of the observing system. The addition of the observing systems expands the role of the change agent to include reflexive

practices and attention to how one authors the change. The application of cybernetic metaphors argues for attention to the observing process and the interaction of the change agent which contributes simultaneously and interdependently to the change process. It is the concretization of mental maps that makes them ponderable and changeable through a reflexive inquiry.

Reflexivity:

Rothman (1997) distinguishes between reflexivity which is an immediate visceral response and reflexivity in which the time dimension is stretched to allow humans to stop and think about something in order to respond. According to Abram (1996) reflexivity as a linguistic act has a long history beginning with the advent of the written word, which allowed human kind to hold words still and to reflect back over time. In Western thought Socrates is credited with breaking from the mimetic oral traditions and developing Socratic questioning--a reflexive process for asking questions about concepts.

The key concept of reflexivity is not present in all descriptions of second order change. Watzlawick et. al. (1974) take a pragmatic approach and do not emphasize the importance of the reflexive relationship. For obvious reasons other writing such as Bartunek and Moch (1987) based on citations of Watzlawick et. al. also neglect the reflexive relationships. Because Argyris (1992) includes feedback as an essential part of double loop learning, his theory includes reflexivity but does not label it as such. His two models of communication describe a closing down (Model I) and a opening up (Model II) of the reflexive process. Boscolo et. al. (1987) and Sluzki (1985) work directly from cybernetic metaphors and emphasize the relationship of the observing system to the change process. In the folding back of information, Boscolo et. al. have developed a reflexive form of questioning that is called circular questioning.

To complete the definition of an observing system, one must also ask who, what, where, and how is the change being authored as a result the relationships emerging in the observing system. Instead of focusing on the narrow frame of mental maps, Rothman (1997) suggests that reflexivity is an inclusive concept that defines the relationship between self, others, and context. This shift to other and to context suggests a co-creation or collective authoring.

Authoring: The idea of collective authoring brings into question the initial key concept of mental mapping. Collective authoring implies the social construction of knowledge and moves away from a strictly mental model of knowledge. Situated in this way, this author defines power (White and Epston, 1990) and judgment (Argyris, 1992) as barriers to co-authoring. For the psychotherapists second order change marked the transition to a belief in the social construction of knowledge, yet in the literature this is not clearly defined. The orders of change progress from the objective authoring of first order to an intersubjective authoring of the third order.

Three Orders of Change--Varying Approaches for Intervention

Based on the identified key concepts of mental mapping, reflexivity, and authoring the author suggests three levels of intervention. In the first order of

change the interventionist designs change strategies that improve the current mental map. Reflexive moves are designed to define and clarify the existing map with the change agent being the removed, objective broker of the change process. In second order change the change agent questions the mental maps using a reflexive process that brings self, other, and context into the observing process. (The interventionist can be external or internal.) At this level the role of the interventionists vacillates between being the broker of the change and engaging the other in the process. The degree in which the observing system including reflexivity and co-authoring is embedded in the process defines a possibility for third order change. At the third order the interventionist operates as if a intersubjective process is the aim of the change process, not the changing mental maps as articulated at the earlier levels. This author argues that when the change agent realizes that mental maps are a facet of the observing system the possibility of a third order interventionist strategy is possible. From this level, the change process becomes a continual inquiry and co-construction of the change process.

Methods and Data:

This is a theoretical dissertation that critiques and expands existing theory based on data drawn from the work of Bateson (1972), Watzlawick, Weakland, and Fisch (1974), Bartunek and Moch (1987), McWhinney (1992), and Argyris (1992). The first problem addressed in this dissertation is the confusion about labels and the inconsistencies in the descriptors of levels of learning and the orders of change. Through analysis of existing theory, this author explicates key concepts that help to bound the theory and give focus to the definition of each level. By creating a disciplinary matrix organized around the key concepts the author is able to compare inter and intra level congruencies.

Conclusions:

In conclusion, the author explains how school reformers have been misguided by the language of ordered change. Because of a short citation trail, most references in organizational development and education writing omit reflexivity as a key concept in ordered change. The work the psychotherapies suggests that educators might benefit from paying attention to how the act of observing affects the change process. This paper argues for the development of intersubjective change processes that opens the gate for third order change. Reflexivity becomes the pivotal process that fosters the shift from singular perspectives, to multiple perspectives, to the realization of power of intersubjective creation.

Educational and Scientific importance of the study:

This theoretical dissertation contributes to the practical application of the first, second, and third order change. The explication of a fissure in the second-order clears up epistemological questions about this theory and opens the theory to the possibility of intersubjective authoring.

Bibliography

- Abram, D. (1996). *The Spell of the Sensuous*. New York: Vintage Books.
- Argyris, C. (1992). *On Organizational Learning*. Cambridge, MA: Blackwell Publishers.
- Bartunek, J. M. and Moch, Michael K. (1987). First-Order, Second-Order, and Third-Order Change and Organization Development Interventions: A Cognitive Approach. *The Journal of Applied Behavioral Science*. 23(4), 483-500.
- Bateson, G. (1972). *Steps To an Ecology of Mind*. New York: Chandler.
- Boscolo, L., Cecchin, G., Hoffman, L., & Penn, P. (1987) *Milan Systemic Family Therapy*. New York: Basic Books.
- Fleuridas, C., Nelson, T. S., & Rosenthal, D. (1986). The Evolution of Circular Questions: Training Family Therapists. *Journal of Marital and Family Therapy*. 12(2), 113-127.
- Harries-Jones, P. (1995). *A Recursive Vision: Ecological Understanding and Gregory Bateson*. Toronto: University of Toronto Press.
- McWhinney, W. (1992). *Paths of Change: Strategic Choices for Organizations and Society*. Newbury Park, CA: Sage.
- Parry, A. & Doan, R. (1994). *Story Re-Visions: Narrative Therapy in the Post Modern World*. New York: Guilford.
- Rothman, J. (1997). *Resolving Identity-Based Conflict: in Nations, Organizations and Communities*. San Francisco: Jossey-Bass.
- Senge, P. M. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Doubleday.
- Schön, D. (1983). *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.
- Schön, D. & Rein, M. (1994). *Frame Reflection: Toward the Resolution of Intractable Policy Controversies*. New York: Basic Books.
- Sluzki, C. (1985, May-June). A Minimal Map of Cybernetics. *Networker*, p. 26.
- Watzlawick, P., Weakland, J., and Fisch, R. (1974). *Change: Principles of Problem Formation and Problem Resolution*. New York: W. W. Norton.
- White, M. & Epston, D. (1990). *Narrative Means to Therapeutic Ends*. New York: W. W. Norton.



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: *A Figure in the Second Order: A New Look at Change & School Reform*

Author(s): *Diane P. Zimmerman*

Corporate Source:

Publication Date:

April 15, 1998

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1



Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A



Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B



Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign
here,→
please

Signature: *Diane P. Zimmerman*

Printed Name/Position/Title:
Diane P. Zimmerman

Organization/Address:
4323 Cadenasso Ln., Suisun, CA 94585

Telephone:
707-864-0180

FAX: *707-864-0185*

E-Mail Address:
DPZimmer@aol.com

Date: *5/24/98*



Clearinghouse on Assessment and Evaluation

University of Maryland
1129 Shriver Laboratory
College Park, MD 20742-5701

Tel: (800) 464-3742

(301) 405-7449

FAX: (301) 405-8134

ericae@ericae.net

<http://ericae.net>

March 20, 1998

Dear AERA Presenter,

Congratulations on being a presenter at AERA¹. The ERIC Clearinghouse on Assessment and Evaluation invites you to contribute to the ERIC database by providing us with a printed copy of your presentation.

Abstracts of papers accepted by ERIC appear in *Resources in Education (RIE)* and are announced to over 5,000 organizations. The inclusion of your work makes it readily available to other researchers, provides a permanent archive, and enhances the quality of *RIE*. Abstracts of your contribution will be accessible through the printed and electronic versions of *RIE*. The paper will be available through the microfiche collections that are housed at libraries around the world and through the ERIC Document Reproduction Service.

We are gathering all the papers from the AERA Conference. We will route your paper to the appropriate clearinghouse. You will be notified if your paper meets ERIC's criteria for inclusion in *RIE*: contribution to education, timeliness, relevance, methodology, effectiveness of presentation, and reproduction quality. You can track our processing of your paper at <http://ericae.net>.

Please sign the Reproduction Release Form on the back of this letter and include it with two copies of your paper. The Release Form gives ERIC permission to make and distribute copies of your paper. It does not preclude you from publishing your work. You can drop off the copies of your paper and Reproduction Release Form at the ERIC booth (424) or mail to our attention at the address below. Please feel free to copy the form for future or additional submissions.

Mail to: AERA 1998/ERIC Acquisitions
University of Maryland
1129 Shriver Laboratory
College Park, MD 20742

This year ERIC/AE is making a **Searchable Conference Program** available on the AERA web page (<http://aera.net>). Check it out!

Sincerely,

Lawrence M. Rudner, Ph.D.
Director, ERIC/AE

¹If you are an AERA chair or discussant, please save this form for future use.



The Catholic University of America